Inventor: LAROSE et al.
Docket No.: 9555.123USU1
Title- METHOD FOR SCREENING AND/OR IDENTIFYING FACTORS THAT BIND TO

NUCLEIC ACIDS

Attorney Name Gregory A. Sebald Phone No 612 336 4728 Sheet 1 of 6

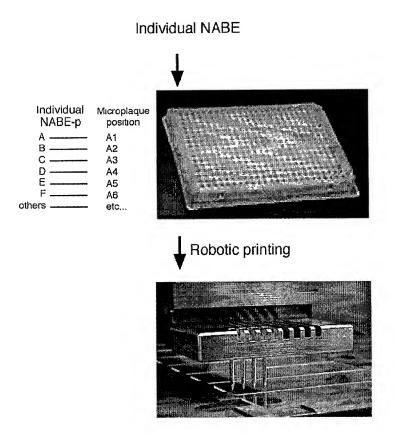


Figure 1. Arraying of individual NABE-p for the microarray fabrication.

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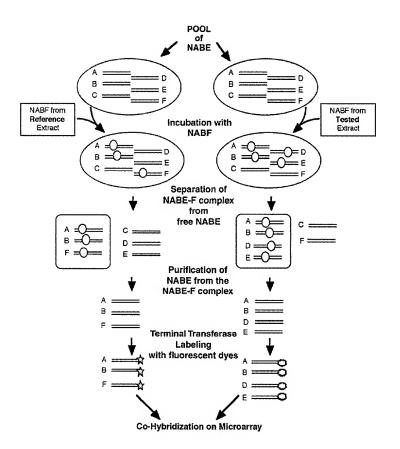


Figure 2. Schematic representation of the analysis of differentially-bound NABEs by DPA.

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Image processing



Data analysis



Ratio on each spotted NABE-p is calculated

Expected results from the example shown in

figure 2

a)ratio of 1

b)ratio of 1

c)no ratio

d) ratio < 1

e∫ratio > 1

f) ratio > 1

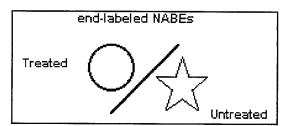


Figure 3. Identification of differentially bound NABEs. A ratio of 1 reflects an equivalent DNA-binding activity for a given factor in both conditions tested. A ratio <1 signals a reduced DNA-binding activity while a ratio >1 reflects an increase in such activity. No ratio (no signal) means no factor bound in either condition.

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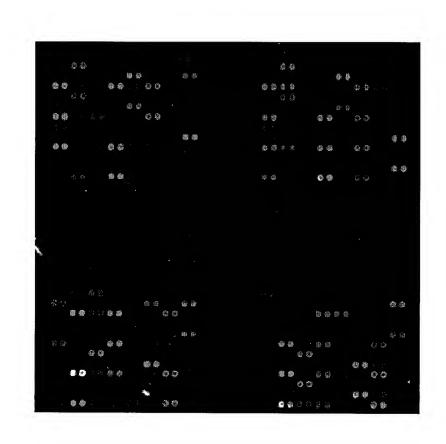


Figure 4. A hybridized NABE-p array with Cy5 end-labeled NABEs. 300, 90 and 9 pg of each NABE-p are spotted in duplicate. Non-specific oligos are also spotted as negative controls.

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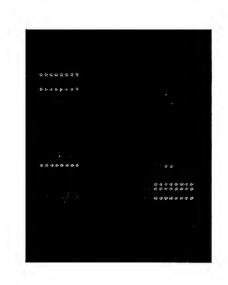


Figure 5. Hybridization of NABEs retrieved from a shifted NABE-NABF complex to a NABE-p microarray.

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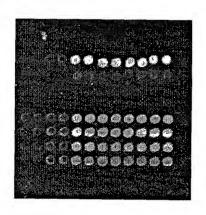


Figure 6. Co-hybridization of NABEs incubated in K562 cells nuclear extracts and recovered by EMSA to a NABE-p microarray. NABEs incubated with an extract from untreated cells were labeled with Cy3 (green) while NABEs incubated with an extract from TPA-treated cells were labeled with Cy5 (red). Yellow spots reflect equivalent quantities of both types of NABEs.